

## MOLLUSCA OF H.M.S. 'CHALLENGER' EXPEDITION.

I. Preliminary Report to Prof. Sir C. WYVILLE THOMSON, F.R.S.,  
Director of the Civilian Scientific Staff, on the Mollusca  
dredged during the Exploring Voyage. By the Rev. ROBERT  
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[Read November 21, 1878.]

To begin at once the publication of the Mollusca of the 'Challenger,' however undesirable in many ways, is a necessity if the whole is to be overtaken in reasonable time.

The mass of material which has come into my hands is enormous.

In the end of 1876 (Nov. 17) there were sent me two large boxes of shells containing very many smaller ones, each labelled with note of locality whence their contents came; and in the beginning of 1878 (Jan. 17) of additional material there came into my hands 48 boxes, chiefly small, of shells, 131 bottles, large and small, and 45 tubes containing the shells with the animals preserved in spirit, and 36 bottles of miscellaneous dredgings, some dry, some in spirit.

My first duty was to arrange all the distinct shells, separating the species, putting each species from each locality in a box by itself, and marking on each the name of the genus and of the species, where possible, with note of the station whence it came and other information likely to be useful. The admirable accuracy with which the material from each locality had been kept apart and labelled made this possible.

Then under each station a catalogue of the genera and species belonging to it had to be drawn out, with general index to the whole.

Having thus cleared off the more manageable part of the mass, the dry miscellaneous dredgings had next to be sifted through sieves, and the shells, most of them, of course, very small, to be picked out and then sorted, as had been done with the others. Of this a good deal is still imperfectly done.

Finally, the wet miscellaneous dredgings, *i. e.* those preserved in spirit, have to be similarly treated. This is a very much more troublesome task, and has not yet been fully done. Further, I am still in arrears with the individual specimens preserved

in spirit, the handling of which, with the sorting into bottles, and still more the examination and even partial dissection of the animals, require very much more time. Some 300 of these have, however, even already been sorted out.

In all, over 2000 separate lots, including from 1200 to 1500 distinct species, have been gone over, separated, put into boxes or bottles, labelled, catalogued, and indexed. There yet remains, indeed, a very great deal to do ; but through it I do, to some extent, see my way.

Simultaneously with all this, authorities have been consulted, and types in the British Museum and elsewhere, as opportunity offered, have been examined, to determine which of the species under my charge are already known and which are new.

Any one who has experience of such labour, pleasant though it be, will recognize that a very heavy share of work has fallen to me, in which, without much kind help at home, and especially from an early and able pupil of your own, even so much as has been done could not have been accomplished.

My object now is to make a beginning of publishing, so as to clear my way of any thing I can get off my hands, to be ready for the final publication of the 'Challenger' Reports when that time comes, and to secure help now in correcting my mistakes. Need I say that these are inevitable? To escape them, I should require a universal knowledge of the world's conchology, and a universal library of conchological literature. Very little help in either direction is available here in Edinburgh.

I am very painfully aware that specialists, both in geographical and in scientific groups, will recognize oversights—failures of memory and positive blunders that may seem to them incredible. I very humbly make to them my apology beforehand, and entreat of their good will such help as lies under their hand to give in allowing me to examine specimens of the rarer species, and in sending me copies of papers I may be apt to overlook. Kind help in this direction I have already thankfully to acknowledge.

The order of publication to be followed now must depend partly on my own convenience, and partly on other exigencies.

In conclusion, I may just say that the Land-shells I have as yet scarcely touched, that the Brachiopods have been ably completed by Mr. Davidson, and of the Cephalopods, Pteropods, and Nudibranchs I have been relieved.